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To: Microsoft ATR
Date: 1/27/02 10:34pm
Subject: Microsoft Settlement

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I am concerned about the settlements being discussed in the Microsoft Anti-trust case. Every settlement offer I've seen seems to forget that every court ruling has agreed that Microsoft is a monopoly and abused it's monopoly power. This letter is my attempt to classify what I think the settlement agreement should contain. I can't stress how lacking I find the current settlement plan. As a computer professional, the current settlement will do nothing but harm the current market and stifle any future innovation.

Relying upon conduct remedies without strict enforcement will not work. This has been tried with Microsoft before and it didn't work. Microsoft's statements and actions underscore that they do not agree with the courts ruling and will subvert it by any means necessary. The court must supervise Microsoft closely and have strict penalties for non-compliance. Microsoft should have no control over this oversight. The current settlement offer is filled with loopholes that Microsoft will exploit at every available opportunity.

Mostly I think the settlement should focus on defusing the power the Microsoft abused, encouraging competition, and forcing Microsoft to make amends for it's past deeds.

I propose that remedies should affect Microsoft in the main ways:

        - divest non-core parts of Microsoft that are parts of attempts to monopolize new markets. (Pocket PC, WinCE, XBox, Microsoft Games).
        - adjust Microsoft's contracts with Original Equipment Manufacturers (OEM).
        - have Microsoft divulge information needed for competition products to interoperate with Microsoft Products. That is, bring competition into the market place.
        - Fines paid to a non-profit association to encourage open source development.

Divest non-core MS Assets

Formost, I believe that the rulings should not force a full scale breakup of Microsoft. Divulging portions of Microsoft that aren't core business but are attempts to gain further control and penetration in new markets should be considered. I would consider the X-Box gaming console, and Pocket PC (WinCE), and Microsoft Games as prime targets for divesting. They are not part of the core business so will not harm Microsoft. By removing these ventures from direct Microsoft control, they can be left to sink or swim on their own merits, as free markets are supposed to operate.

Even so, this is the least of the remedies I propose. If the other remedies are enacted, the market might be able to correct for Microsoft's deep pockets.

OEM Remedies

The primary remedy must include freeing Original Equipment Manufacturers (OEMs) from Microsoft's control. Everyone has heard of the main OEM's, Dell, Gateway, IBM, Compaq, but this list includes the multitude of small shops that build custom PCs.

The primary tool that Microsoft used to control OEMs was altering the price of Windows. If an OEM didn't follow the Microsoft line, Microsoft would raise it's price for Windows for that OEM. Since OEMs can't complete without Windows, raising the price could directly hurt their profits and marketshare. To couter this, Microsoft should be forced to use unified pricing. The cost of Windows should be based upon the volume sold and on nothing else. Every OEM could see the price and it

would be the same for any given level of volume. If you sold 1 million copies of Windows the cost is $x. If you sell 5 million the price might be less, but it's the same for every OEM who sells 5 million copies.

Furthermore, Microsoft requires that it's OEMs support the copies they sell. Since this is the case, Microsoft's agrument that it needs to control "first boot" (the users first experience with Windows when they boot a new machine) is a fallacy. Especially since Microsoft no longer allows full install disks to be distributed with new machines (users can't reinstall Microsoft Widows from nothing, they can only restore the factory default settings). If Microsoft does not support the user, then it no longer needs to control first boot. The remedy should allow the OEM to do anything to their installed copy of Windows that an end user can do.

This power to "do anything an end user could do" must not be limited. It must specifically include the following powers, so Microsoft can not try subvert the language of the ruling as it did it's earlier consent decree.

        - OEMS can create Multiple Boot machines, specicially allowing other OS's to be installed as the default.
            - OEMS can remove/add icons from the desktop
            - OEMS can remove/install programs as well as components of Windows.

Simply put, an OEM should be able to configure Microsoft Windows in any way open to an educated consumer.

"Multiple Boot" should be expanded upon, since due to Microsoft, few outside the computer profession have heard of it. There are other Operating Systems (OS) for Intel compatible machines. An experienced user can configure a machine so that it has multiple operating systems and choose which one to run when the machine starts up, with OS chosen as the default (the one that will boot if no choice is made).

The strongest OS competitor to Microsoft is GNU/Linux, an open source operating system. The cost of GNU/Linux is zero, it's produced by thousands of volunteers instead of a corporation.

Installing Linux is easy for an educated user, harder for a novice users. It's difficult to get Windows and Linux to co-exist on machine, the process is daunting to normal users. For experienced users (an OEM) it's easy. Once installed, it's easy to switch back and forth from one Operating System to another by a simple reboot.   Right now no OEM sells a dual-boot Linux/Windows computer.

No OEM offers a dual boot Linux/Microsoft Windows computer because Microsoft's contract with them specifically forbids this. A machine that has Windows on it can not have any other visibile Operating System, that is no way to choose the other operating system. This clause must be removed as it's a primary method that Microsoft uses to maintain its monopoly. If users will not buy machines w/o Windows, but would buy machines that easily allowed them to switch from Windows and another operating system, they should be allowed this choice. Instead, Microsoft abuses it's position to ensure that this option is never given to consumers.

Similarly, Microsoft uses it's doctrine of "First boot" as part of it's plans to move into new markets.   By removing Microsoft's control of first boot, and giving it to multiple OEMs to control, the market can begin to correct for Microsoft's past abuse. The best thing about this is that control is moved outside Microsoft into multiple hands and the government doesn't have to dictate what can and can not go on the desktop.   Microsoft's scare tactics about fracturing the marketplace with non-compliant versions of Windows is just that: a scare tactic.

Open Information

There should be enough open information for a programmer to write
programs which read/write Microsoft file formats and communicate with
Microsoft products. That is, be able to ensure that they can create a
product that can compete and communicate with Microsoft's Products. I
do not mean, as has been suggested by some, that Microsoft should be
forced to move it's source code into the public domain.   Instead,
enough information would be divulged for others to write programs which
compete with MS products.

To encourage competition, Microsoft should be forced to fully and openly
specify any protocol used to comunicate with Microsoft products. The
following should be fully specified:

        - Any and All File Formats used by any Microsoft Product.
Specifically include Microsoft Office.

        - Document all Application Programing Interfaces (API). Any API
used by a Microsoft product must be documented. Products can have
hidden internal APIs used only by that specific program.   Microsoft
Windows XP can have hidden APIs, but they can only be used by Microsoft
Windows XP.   If a separate product (Microsoft Office, Microsoft IIS,
etc) uses the API then it must be fully documented. Care must be taken
to describe product. A simple definition is if it's available for sale
individually it's a product, even if it's offered in a bundle with other
products. Microsoft Word is a product even though it's part of
Microsoft Office as well. If a something is offered as an optional
install, then it's a separate product. If Microsoft currently has part
of their website specifically targeted towards it, then it's most likely
a separate product.

        - All communication protocols must be documented. This includes
protocols for networking (including security protocols for
authenticating with the network), interapplication communication, and
any other method that two individual Microsoft products communicate with
each other. (Any protocol that one licensed copy of Microsoft Windows
XP uses to communicate with another copy must be fully documented.)

Note, these remedies do not include Microsoft having to release any
source codes.   They do enable other companies to freely products that
compete with Microsoft. Microsoft can still compete on pricing,
quality, and innovation. Microsoft even gets the head start as they
only have to release the specification when the release a product, so
Microsoft gets a head start (and has an enormous head start with all
it's current programs). Furthermore, this specification is not an
onerous burden. It should be part of Microsoft's existing engineering
discipline. Much of this data is already available, but it's currently
licensed so that you cannot use the information to create products that
compete with Microsoft.

After documenting, if a shipping Microsoft product does not conform to
the specification Microsoft will have a month to do one of the following:

        - amend the specification so the given product confroms to the new
specification.
        - release an update to the product so that it conforms.
        - remove the product from sale until such time as it conforms to
the specification.

Remember, Microsoft writes the specifications in the first place, there
should be no reason it's products won't comply with their own
specifications.

If Microsoft does not comply, then the court should take strict actions
for non-compliance. The first action should be a large fine.   But, for

extreme cases, in the settlement should give the court the option to take the complete source code of the given product and release it into the public domain. If Microsoft claims that it cannot factor out the code for the product for some reason, it should be forced to open all codes until the given product is fully specified. Again, this threat should only be used if Microsoft is found non-compliant with their own specifications and fails to fix them after initial fines. The heavy hand hiding behind the agreement will ensure Microsoft's compliance.

Furthermore, any patent that Microsoft has that covers any part of the released specification must be opened into the public domain. Microsoft has stated that this is unacceptable, but anything less is not an acceptable remedy from the court. Patents are not a major factor in the computer industry, as Software patents weren't even legal until past 1992. Some reading on "patent abuse" will show there is wide-spread support for banning computer patents in the industry. This is a narrowly defined opening of specific patents though, not of every Microsoft patent. Only those needed for to implement a given specification would be opened. Otherwise, the court risks having Microsoft open it's specification only to find that it's useless as no one can implement them due to patent issues.

Security should not be a reason that Microsoft can not reveal a specification, even in our current climate. Security that relies upon hiding protocols does not work, it's referred in the security community to as "Security through Obscurity". Simply put, it relies upon others not figuring out how you did something as an essential component of security. Someone eventually figures out how the system works, and then breaks it. No matter how well done, a bad design can be exploited.

In an open process, focus is put on making the security design sound. This is then implemented. Some implementations even give out full source code so any implementation mistakes can be corrected. A survey (avoiding Microsoft sources but focusing on the security community) will find that OpenBSD, Linux, and Apache have a much better security record than Microsoft Products despite having all their source codes freely available.

But, most importantly in today's current world, multiple implementations are stronger. That is, if everyone uses the same security tools, it's much easier to exploit them. In biology, a genetically diverse population is more resistant to disease. If there are multiple instances of Microsoft's security design, some will be resistant to exploitation. This makes all computers more secure.

Fines

There is little doubt that Microsoft's current net worth is largely due to it's monopoly. As such the fines should be of the same order. This poses a sticky problem for the court to administer a multi-billion dollar fine.

Formost, since Microsoft uses this "warchest" to continue it's conquest of it's current markets and extend into new ones, their bank account must be depleted. To avoid the Government administering such a large fine, Microsoft should be ordered to pay out a large percentage of it's case reserves to it's shareholders. This is quite fair, the shareholders loose no value and suffer no harm. At the same time, Microsoft looses the ability to buy it's way into new markets and to buy out it's competition.

At the same time, by it's abusive tactics Microsoft did harm the market. So it should be forced to pay some minor restitution to the defendents listed in the case. This part is lacking in the current agreement.

But, simple restitution is not enough due to the widespread nature of
Microsoft's abusive actions.   It should be forced to by a billion
dollars into a fund which will promote open source development.   This
will encourage development of software which competes with Microsoft but
doesn't support any one company directly.   By earmarking some of these
funds to the development of educational software it could also help
address a national need at the same time.   Schools would get access to
free high quality software that could be modified as suits them.   The
fund should stipulate that software written is released under a
currently approved open source license.   While the fund should support
software written for Microsoft Windows, it should require that any
software written for Windows also support some other operating system.
The converse should not be true, if the software is written for Linux,
Mac OS X, Mac OS 9, or any other non-microsoft operating system, it
should not be required to support Microsoft Windows.

This last fine will encourage competition in the marketplace and help
ensure that Microsoft's hold on the market diminishes.